

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

QUALITATIVE DATA SOLUTIONS, LLC,)	
)	
Plaintiff,)	Civil Action No. _____
)	
v.)	JURY TRIAL DEMANDED
)	
ADT, INC.)	
)	
Defendant.)	
)	

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Qualitative Data Solutions, LLC (hereinafter “QDS”), by and through its undersigned attorneys, files this Complaint for Patent Infringement against Defendant ADT, Inc. and alleges as follows.

NATURE OF ACTION

1. This is an action for infringement of United States Letters Patent No. 8,818,532 under the Patent Laws of the United States, 35 U.S.C. § 1, *et seq.*

THE PARTIES

2. Plaintiff QDS is a limited liability company organized and existing under the laws of the State of Wyoming with its principal place of business at 1712 Pioneer Ave Suite 500, Cheyenne, Wyoming. QDS is in the business of licensing patented technology. QDS is the assignee of all right, title, and interest in United States Letters Patent No. 8,818,532.

3. On information and belief, Defendant ADT, Inc. is a corporation organized and existing under the laws of the State of Delaware, with a principal place of business at 1501 Yamato Road, Boca Raton, Florida. On information and belief, Defendant does business itself, directly

and/or through its subsidiaries, affiliates, and agents, in the Eastern District of Texas, including at Defendant's place of business at 215 Winchester Drive, Unit 105, Tyler, Texas.

JURISDICTION

4. The claims in this action arise under the Patent Laws of the United States, Title 35 of the United States Code. Accordingly, this Court has subject matter jurisdiction over the patent infringement claims in this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

5. Defendant is subject to this Court's specific and general personal jurisdiction pursuant to the Texas Long Arm Statute, due at least to its substantial business conducted in this forum, directly and/or through one or more of its subsidiaries, affiliates, and/or intermediaries, including (i) having solicited business in the State of Texas, transacted business within the State of Texas, and/or attempted to derive financial benefit from residents of the State of Texas, including benefits directly related to the instant patent infringement causes of action set forth herein; (ii) having placed products and services into the stream of commerce throughout the United States and having been actively engaged in transacting business in Texas and in this District, including at Defendant's place of business at 215 Winchester Drive, Unit 105, Tyler, Texas; and (iii) either alone or in conjunction with others, having committed acts of infringement within this District, including at Defendant's place of business at 215 Winchester Drive, Unit 105, Tyler, Texas, and/or induced others to commit acts of infringement within this District. Defendant has, directly and/or through a distribution network, purposefully and voluntarily placed infringing products and services in the stream of commerce knowing and expecting them to be purchased and used by consumers in Texas and in this District.

6. On information and belief, Defendant, directly and/or through one or more subsidiaries, affiliates, and/or intermediaries, has advertised and continues to advertise (including

through websites), used, offered to sell, sold, distributed, and/or induced the sale and/or use of infringing products and services in the United States and in this District, including at Defendant's place of business at 215 Winchester Drive, Unit 105, Tyler, Texas. Defendant has, directly and/or through a distribution network, purposefully and voluntarily placed such products and services in the stream of commerce via established channels knowing and expecting them to be purchased and used by consumers in the United States and this District. Defendant has committed acts of direct infringement in Texas and/or committed indirect infringement based on acts of direct infringement by others in Texas and in this District, including Defendant's customer end-users.

7. On information and belief, Defendant conducts business in Texas, including advertising, using, offering to sell, distributing, and selling infringing products in this District. Defendant places such infringing products and services into the stream of commerce via established channels knowing or understanding that such products and services would be offered for sale, sold, and/or used in the United States, including in the State of Texas and this District. The exercise of jurisdiction over Defendant would therefore not offend the traditional notions of fair play and substantial justice.

8. On information and belief, Defendant has appointed C T Corporation System, 1999 Bryan St., Ste 900, Dallas, Texas, as Defendant's agent for service of process in the State of Texas.

VENUE

9. Venue is proper in this judicial district under 28 U.S.C. § 1391(c)(2) and 1400(b) because Defendant employees at least one individual who is conducting Defendant's business at 215 Winchester Drive, Unit 105, Tyler, Texas.

THE PATENT IN SUIT

10. On August 26, 2014, United States Letters Patent No. 8,818,532 (“the ’532 patent”) entitled “SYSTEM AND METHOD FOR SELECTIVELY CONTROLLING AND MONITORING RECEPTACLES AND FIXTURES CONNECTED TO A POWER CIRCUIT IN A BUILDING,” was duly and legally issued by the United States Patent & Trademark Office. A copy of the ’532 patent is attached hereto as Exhibit 1.

11. The ’532 patent issued from U.S. Patent Application Number 13/217,221, which was filed on August 24, 2011. The ’532 patent was granted a term extension of 291 days pursuant to 35 U.S.C. § 154(b), which means the ’532 patent will remain in force until at least June 10, 2032.

12. The named inventor of the ’532 patent assigned his rights to Zig Zag Innovations, LLC, who assigned its rights to QDS. QDS is therefore the current and sole owner of all rights, title and interest in and to the ’532 patent and, at a minimum, of all substantial rights in the ’532 patent, including the exclusive right to enforce the ’532 patent and all rights to pursue past, present and future damages and to seek and obtain injunctive or any other relief for infringement of the ’532 patent.

Overview of the Technology

13. The ’532 patent relates to an area circuit in which specific outlets can be automatically and individually controlled and to smart outlets for use in such an area circuit.

14. It has long been known that data can be transmitted through power wire cables, while electricity is simultaneously being transmitted through those same cables. This is accomplished by transmitting low voltage signals at high frequencies, *i.e.*, frequencies over 100 kHz. The transmission of the data has no appreciable effect upon the transmission of electricity

and vice versa, and so transmitting data through power lines has been used for computer networking and even for telephone communication wiring. Data transmission through power cables has also been used to control smart outlets, where those outlets can be activated or deactivated by data transmission. *See* the '532 patent at col. 1, ll. 33-38.

15. In such systems, the control signals are typically generated using a desktop computer. The desktop computer uses a signal converter to convert command signals into data signals that can travel through power lines. Since data is being transmitted through active power lines, the installation and expense of installing such systems is considerable. *See id.* at col. 1, ll. 38-43.

16. Furthermore, commercially available smart outlets are very expensive. This is due to the electronics required within the smart outlet to identify the smart outlet to the overall system. A typical home may have over one hundred outlets and dozens of lighting fixtures. *See id.* at col. 1, ll. 43-48.

17. Being able to place an expensive smart outlet into such a multitude has made such prior art systems too expensive and too complex for use by the average homeowner. Accordingly, smart outlets are typically only installed by professionals in luxury homes and ultra-high energy efficient commercial buildings. *See id.* at col. 1, ll. 48-53.

18. A need therefore existed at the time of filing of the application from which the '532 patent issued for a system and method of simplifying the use of smart outlets. The '532 patent provided smart outlets that an average homeowner could afford to use and be able to install throughout the home. *See id.* at col. 1, ll. 48-53.

The Patented Invention

19. The present invention is an area circuit for use in a building or the like which includes at least one smart outlet having a receptacle, an internal on/off switch, and a selectively changeable identification code, and a control unit coupled to that smart outlet by an electrical power cable. *See* the '532 patent, col. 5, l. 29 to col. 6, l. 7.

20. The inventive circuit may form part of a system that enables specific outlets and fixture switches in the circuit to be automatically and individually controlled. Such a system may also include smart fixture switches. Each such smart fixture switch has an internal on/off switch, and a selectively changeable address code. *See* the '532 patent at col. 1, l. 62 to col. 2, l. 3.

21. An electrical power cable extends throughout the area circuit providing power to the various smart outlets and smart fixture switches. The smart outlets only conduct electricity to their receptacles when their internal on/off switches are "on." Likewise, the fixture switches are only capable of passing electricity when their internal on/off switches are turned "on." *See id.* at col. 2, ll. 4-10.

22. A control unit is coupled to the electrical power cable at a point in the circuit before the first smart outlet or smart fixture switch. The control unit generates an addressed control signal within the electrical power cable. The addressed control signal selectively controls the internal on/off switches in the smart outlets and the smart fixture switches. The addressed control signal generated by the control unit, however, must be properly addressed to a smart outlet or a smart fixture switch in order for that smart outlet or smart fixture switch to respond. By changing the address codes associated with each smart outlet and smart fixture switch, different elements of an area circuit can be controlled using a single command signal. Likewise, many different elements can be controlled using different command signals. *See id.* at col. 2, ll. 11-24.

23. Referring to FIG. 1, a schematic for the wiring of a typical residential home is shown. As can be seen, the home receives power through electrical power cables **12** that run to the house **10** from a local power utility. The electrical power cables **12** run into a main circuit breaker panel **14**. The circuit breaker panel **14** contains multiple circuit breakers. Each circuit breaker controls a specific area circuit **18** within the home **10**. *See* the '532 patent at col. 2, ll. 50-56.

24. System **20** includes the use of control unit **22**, smart outlets **24** and smart fixture switches **26** that enable each individual circuit to be separately programmed and controlled. *See* the '532 patent at col. 2, ll. 57-60.

25. Referring to both FIG. 1 and FIG. 2 of the '532 patent, it can be seen that a control unit **22** is provided for each area circuit **18** within a home. Area circuit **18** can also be deployed in commercial real estate, such as office buildings, and large residential complexes, such as apartments or condominiums. Control unit **22** is placed in series between the primary circuit breaker panel **14** and the first smart outlet **24** in area circuit **18**. Control unit **22** generates control signals to operate the various smart outlets **24** present in area circuit **18**. Control unit **22** also prevents reply signals or looped signals from passing back into the main wiring and affecting other area circuits **18**. *See* the '532 patent at col. 2, l. 61 to col. 3, l. 3.

26. Each smart outlet **24** contains control circuitry **28a**, **28b** that controls an internal on/off switch **30a**, **30b**. The control circuitry **28a**, **28b** responds to command signals **32** sent by control unit **22**, provided those command signals **32** are addressed to the smart outlet **24**. The address of each smart outlet **24** is determined by the use of a set of pin switches **34a**, **34b**. Although the use of pin switches **34a**, **34b** is illustrated, other code setting devices, such as memory cards or ID chips can be used. The use of pin switches **34a**, **34b** is preferred because of the ease in changing between preset codes. *See* the '532 patent at col. 3, ll. 4-15.

27. In addition to an internal on/off switch **30a**, **30b**, each smart outlet **24** also preferably contains a current meter **46a**, **46b** and a signal generator **48a**, **48b** that enables each smart outlet **24** to send signals back to the control unit **22**. *See* the '532 patent at col. 3, ll. 16-20.

28. Each control unit **22** contains its own central processing unit (CPU) **36**. CPU **36** is coupled to a display **38** and to one or more user inputs **40**. Display **38** and user inputs **40** enable a user to interact with program control software being run by control unit **22**. The program control software provides two program functions to each smart outlet **24** connected to area circuit **18**. The first program function is for the on/off control of each smart outlet **24**. Using this program function, a user can immediately send a signal to a specific smart outlet **24** that causes that device to immediately turn either on or off. *See* the '532 patent at col. 3, ll. 21-32.

29. Similarly, using a clock **42** and memory **44** that are coupled to CPU **36**, a user can program specific times that each smart outlet **24** can be activated or be deactivated. It will therefore be understood that a user can turn on/off lights, appliances or any other electrical item that is plugged into a smart outlet **24**. *See* the '532 patent at col. 3, ll. 32-39.

30. The second program function is used for power monitoring. Each smart outlet **24** contains an amp meter **46**. The amp meter **46** measures how much current is presently flowing through smart outlet **24**. The current flow is converted into a data signal by the control circuitry **28a**, **28b**. The data signal is then sent back to control unit **22** using signal generators **48a**, **48b** in smart outlet **24**. *See* the '532 patent at col. 3, ll. 40-47.

31. It will therefore be understood that a user can go to control unit **22** and display how much electrical current is passing through a particular outlet **24**. In this manner, a person can calculate the costs of running various appliances, fixtures, and other electrical items. *See* the '532 patent at col. 3, ll. 47-52.

32. In one embodiment of the invention, control unit **22** may contain a plurality of pin switch devices **50**. In such an embodiment, it is preferred that control unit **22** have up to ten pin switch devices **50**. Each pin switch device **50** can be set to a unique identification code that is shared by one of the smart outlets **24** in the same area circuit **18** as control unit **22**. If a pin switch device **50** on control unit **22** is set to the same identifier code as a pin switch device **34a**, **34b** in smart outlet **24**, then control unit **22** is capable of communicating with that smart outlet **24** and vice versa. *See* the '532 patent at col. 3, ll. 53-64.

33. Furthermore, it should be understood that more than one smart outlet **24** can be set to the same identification code. If this is done, all smart outlets **24** set to the same code will turn on together and off together upon the sending of a single command signal **32** from control unit **22**. *See* the '532 patent at col. 3, l. 64 to col. 4, l. 3.

The Claims are Directed to Patentable Subject Matter

34. The inventions claimed in the '532 patent include an area circuit within a building, such as a home or office building, comprising: (i) at least one outlet assembly having a receptacle, an on/off switch, and a selectively changeable outlet identification code, wherein the on/off switch(es) is configurable between an "on" condition and an "off" condition; and (ii) a control unit coupled to the outlet assembly (or assemblies) by an electrical power cable, wherein the control unit(s) generates an addressed control signal within the electrical power cable(s) that selectively controls the on/off switch(es) in the outlet assembly (or assemblies) only when the outlet identification code(s) is accurately addressed by the addressed control signal(s).

The Claims Are Not Directed to an Abstract Idea or Law of Nature

35. The claims of the '532 patent are not directed to an abstract idea or law of nature.

36. Claim 9 of the '532 patent is directed to an area circuit within a building, such as a home or office building, comprising at least one outlet assembly and a control unit coupled to the outlet assembly (or assemblies) by an electrical power cable. As would be known and recognized by person of ordinary skill in the art ("POSITA"), an outlet assembly, a control unit, and an electrical power cable are all real, tangible, physical devices.

The Claims Do Not Preempt Their Field

37. The claims of the '532 patent do not merely recite an area circuit having one or more smart outlets and a control unit. Rather, the claimed invention is directed to an area circuit in which both the smart outlet(s) and the control unit that have certain specific attributes, such as a selectively changeable identification code, and/or perform certain specific functions, such as generating an addressed control signal.

38. Alternative embodiments of an area circuit having one or more smart outlets and a controller exist and were known prior to the filing of the application from which the '532 patent issued, such as those described in the specification.

DEFENDANT'S SYSTEM AND SERVICES

39. On information and belief, Defendant makes or has made, distributes, markets, sells, offers for sale, and installs or has installed smart home systems and devices, including, without limitation, ADT smart plugs (<https://www.adt.com/smart-switch>) and devices and software for controlling, *inter alia*, ADT smart plugs, such as the ADT Command Smart Security Panel or ADT Pulse Gateway.

40. On information and belief, ADT smart plugs can be controlled as part of an ADT smart security system via the platform ADT Command. On information and belief, ADT Command (formerly called ADT Pulse) is software that enables a customer-user to control

connected security and home automation devices via a physical Command Panel installed on the circuit or via the ADT Control mobile app. On information and belief, a customer-user can program lights to turn on or off at a specific time and remotely turn on or off any electrical device(s) connected to the smart plug.

41. On information and belief, Defendant markets, sells, offers for sale, and/or distributes to, and/or makes or has made and/or installs or has installed for, customer-users packages including one or more ADT smart plugs (each of which is an outlet assembly) and an ADT Command Smart Security Panel or ADT Pulse Gateway (a control unit) connected thereto by an electrical power cable.

42. On information and belief, each ADT smart plug has a selectively changeable identification code that is used by the control unit (*e.g.*, an ADT Command Smart Security Panel or ADT Pulse Gateway) to activate/de-activate that specific smart plug (*i.e.*, turn the smart plug(s) with that identification code “on” or “off”).

43. Despite not having a license to the '532 Patent, Defendant's devices nevertheless incorporate the technology covered by the claims of the '532 Patent, including at least claim 9.

FIRST CAUSE OF ACTION
(Direct Infringement of the '532 Patent)

44. QDS hereby repeats and re-alleges the allegations contained in paragraphs 1 to 43 as if fully set forth herein.

45. The '532 patent is presumed valid under 35 U.S.C. § 282.

46. QDS has complied with the requirements of 35 U.S.C. § 287 as have all prior owners of the '532 patent.

47. The accused devices are covered by one or more claims of the '532 patent, including at least claim 9, and therefore infringe the '532 patent.

48. Defendant's direct infringement of the '532 patent has injured and continues to injure QDS and QDS is entitled to recover damages adequate to compensate for that infringement in an amount to be proven at trial, but not less than a reasonable royalty.

49. Despite Defendant's knowledge of the '532 patent and its infringing activities, Defendant has continued to market, sell, offer for sale, and/or distribute to, and/or make or have made and/or install or have installed for, customer-users devices that infringe the '532 patent, without authority from QDS. Defendant has therefore acted recklessly and Defendant's direct infringement of the '532 patent has been willful, egregious, deliberate and intentional, justifying an award to QDS of increased damages and attorneys' fees and costs.

50. Even after becoming aware of its direct infringement of the '532 Patent, on information and belief, Defendant has made no effort to alter its products or services or otherwise attempt to design around the claims of the '532 Patent in order to avoid infringement. These actions demonstrate Defendant's blatant and egregious disregard for QDS's patent rights.

51. As a result of Defendant's unlawful activities, QDS has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Defendant's continued direct infringement of the '532 patent causes harm to QDS in the form of loss of goodwill, damage to reputation, loss of business opportunities, lost profits, inadequacy of monetary damages, and/or direct and indirect competition. Monetary damages are insufficient to compensate QDS for these harms. Accordingly, QDS is also entitled to preliminary and permanent injunctive relief.

SECOND CAUSE OF ACTION
(Indirect Infringement of the '532 Patent)

52. QDS hereby repeats and re-alleges the allegations contained in paragraphs 1 to 51 as if fully set forth herein.

53. Defendant's customer-users directly infringe one or more claims of the '532 patent, including at least claim 9 thereof, through their use in the United States of Defendant's devices in their normal and customary way.

54. Defendant indirectly infringes by inducing infringement of the claims of the '532 patent by aiding and abetting consumer-users to use Defendant's devices in their normal and customary way in the United States and in this District and by contributing to infringement of the claims of the '532 patent by supplying components and providing instructions to consumer-users for using those components.

55. Defendant aids and abets consumer-users in infringing the claims of the '532 patent with the knowledge of, and the specific intent to cause, the acts of direct infringement performed by these consumer-users.

56. Defendant's indirect infringement of the '532 patent has injured and continues to injure QDS and QDS is entitled to recover damages adequate to compensate for that infringement in an amount to be proven at trial, but not less than a reasonable royalty.

57. Despite Defendant's knowledge of the '532 Patent and its infringing activities and the infringing activities of consumer-users of Defendant's devices, Defendant has continued to market, sell, offer for sale, and/or distribute to, and/or make or have made and/or install or have installed for, customer-users devices that infringe the '532 patent, without authority from QDS. Defendant has therefore acted recklessly and Defendant's indirect infringement of the '532 patent has been willful, egregious, deliberate and intentional, justifying an award to QDS of increased damages and attorneys' fees and costs.

58. Even after becoming aware of its indirect infringement of the '532 Patent, on information and belief, Defendant has made no effort to alter its devices or otherwise attempt to

design around the claims of the '532 patent in order to avoid infringement. These actions demonstrate Defendant's blatant and egregious disregard for QDS's patent rights.

59. As a result of Defendant's unlawful activities, QDS has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Defendant's continued indirect infringement of the '532 patent causes harm to QDS in the form of loss of goodwill, damage to reputation, loss of business opportunities, lost profits, inadequacy of monetary damages, and/or direct and indirect competition. Monetary damages are insufficient to compensate QDS for these harms. Accordingly, QDS is entitled to preliminary and permanent injunctive relief.

PRAYER FOR RELIEF

Wherefore, QDS respectfully prays this Court enter judgment in its favor on each and every Claim for Relief and award to QDS relief, including, but not limited to, the following:

A. Entry of judgment in favor of QDS, and against Defendant, on each and every Claim in this Complaint;

B. Entry of judgment in favor of QDS, and against Defendant, that Defendant has directly infringed the claims of the '532 patent;

C. Entry of judgment in favor of QDS, and against Defendant, that Defendant has indirectly infringed the claims of the '532 Patent by inducing the infringement thereof and/or contributing to the infringement thereof;

D. Entry of judgment in favor of QDS, and against Defendant, that this case is an exceptional case and awarding QDS its reasonable attorney fees and costs pursuant to 35 U.S.C. § 285 and any other applicable statutes, laws, and/or rules; and

E. Entry of preliminary and permanent injunctions against Defendant, and its officers, directors, principals, agents, sales representatives, servants, employees, successors, assigns,

affiliates, divisions, subsidiaries, and all those acting in concert or participation with them, from directly infringing, inducing infringement and/or contributing to the infringement of any claim of the '532 patent.

F. A determination that QDS is the prevailing party and therefore entitled to its taxable costs; and

G. Entry of judgment in favor of QDS, and against Defendant, awarding QDS such other relief the Court deems just, equitable, and proper.

DEMAND FOR A JURY TRIAL

QDS requests a trial by jury, under Rule 38 of the Federal Rules of Civil Procedure, for all issues so triable.

Dated: June 6, 2023

Respectfully submitted,

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